

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/003813

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl.⁷ C12N1/22, C12N5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ C12N1/22, C12N5/00, C08B16/00, C08J9/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

| | | | |
|---------------------------|-----------|----------------------------|-----------|
| Jitsuyo Shinan Koho | 1922-1996 | Jitsuyo Shinan Toroku Koho | 1996-2005 |
| Kokai Jitsuyo Shinan Koho | 1971-2005 | Toroku Jitsuyo Shinan Koho | 1994-2005 |

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

BIOSIS/WPI (DIALOG), JSTPlus (JOIS), PubMed

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| X | JP 9-19285 A (Nisshinbo Industries, Inc.), 21 January, 1997 (21.01.97), (Family: none) | 1 |
| X | JP 7-48470 A (Nisshinbo Industries, Inc.), 21 February, 1995 (21.02.95), (Family: none) | 1 |
| Y | JP 10-195103 A (Chisso Corp.), 28 July, 1998 (28.07.98), (Family: none) | 1-13 |
| Y | JP 2004-49129 A (Hokkaido Technology Licensing Office Co., Ltd.), 19 February, 2004 (19.02.04), (Family: none) | 1-13 |

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
02 June, 2005 (02.06.05)Date of mailing of the international search report
21 June, 2005 (21.06.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| P,X | Mikiko TSURU et al., "Kessho Cellulose Gels o Mochiita shinki Biseibutsu Baiyoho", Japan Society for Bioscience, Biotechnology 2004 Nendo (Heisei 16 Nendo), Taikai Yoshishu, 05 March, 2004 (05.03.04), page 40(2A10p25) | 1-13 |
| P,X | Shigeru DEGUCHI et al., "Takoshitsu Cellulose o Mochiita Shinki Biseibutsu Baiyoho", CSJ: The Chemical Society of Japan Koen Yoko, 11 March, 2004 (11.03.04), Vol.84, page 1171 (3J6-53) | 1-13 |
| P,X | Mikiko TSURU et al., "Takoshitsu Cellulose o Mochiita Shinki Biseibutsu Baiyoho", Kyokugen Kankyo Biseibutsu Gakkaishi, 25 November, 2004 (25.11.04), Vol.3, No.2, pages 104 to 105 (p-36) | 1-13 |
| A | JP 63-32252 B2 (Shigenori SORASHIZU), 01 December, 1988 (01.12.88), & JP 55-044312 A | 1-13 |
| A | KUGA S. The porous structure of cellulose gel regenerated from calcium thiocyanate solution., Journal of colloid and interface science, 1980, October, Vol.77, No.2, pages 413 to 417 | 1-13 |